

# Public Quarterly Report

**Date of Report:** 2nd Quarterly Report – March 30, 2025

**Contract Number:** 693JK32410007POTA

**Prepared for:** DOT-PHMSA, Basim Bacenty, basim.bacenty @ dot.gov, 713-272-2838; Andrea Ceartin, andrea.ceartin @ dot.gov, 406-577-6818

**Project Title:** P3LD: Practical Protocols for Pipeline Leak Detection

**Prepared by:** Colorado State University

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**For quarterly period ending:** March 31, 2025

## 1: Items Completed During this Quarterly Period:

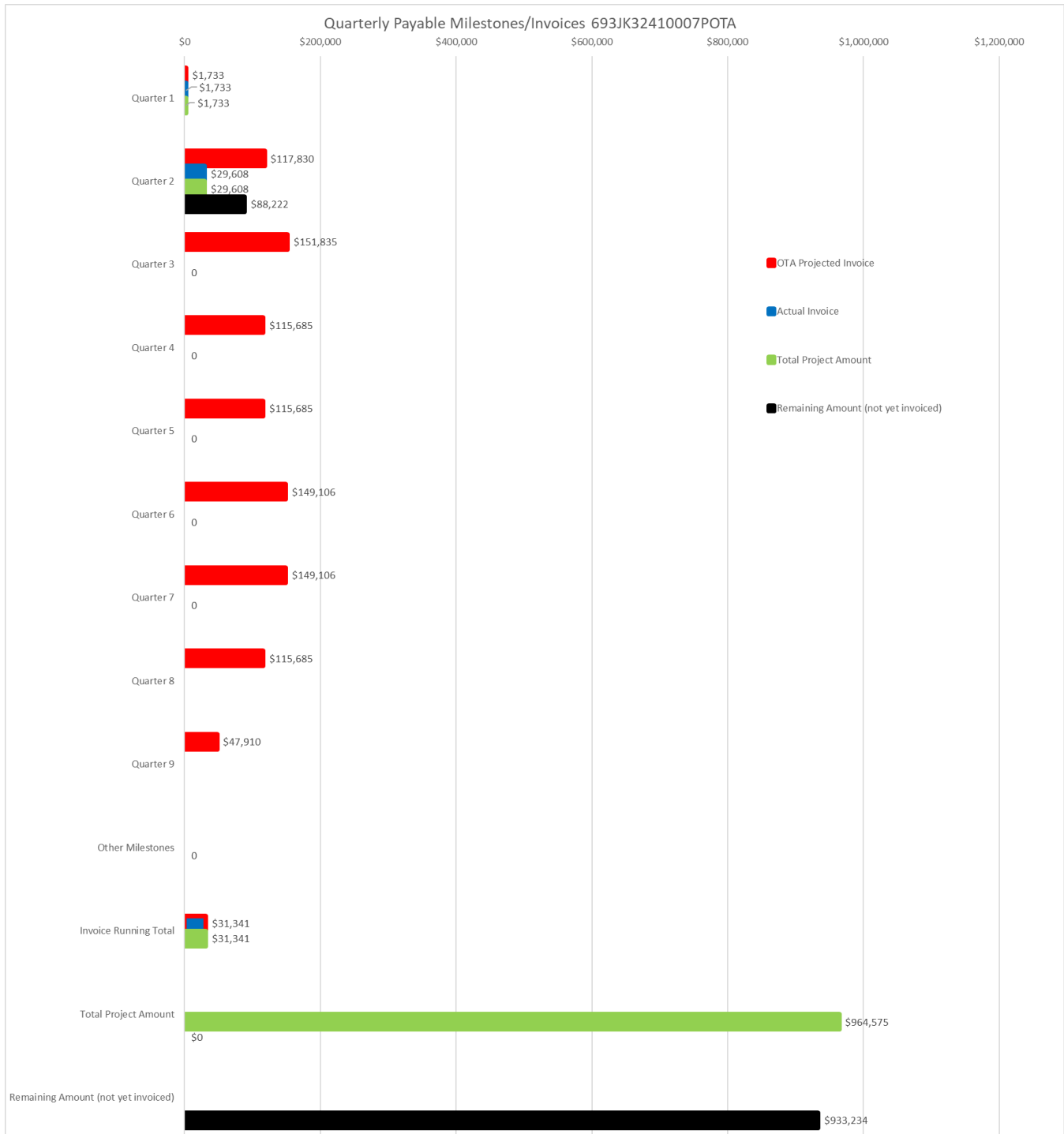
<i>Item #</i>	<i>Task #</i>	<i>Activity/Deliverable</i>	<i>Title</i>	<i>Federal Cost</i>	<i>Cost Share</i>
5	2	Form Technical Advisory Panel		\$ 27,874	\$ 0
8	7.1	2nd Quarterly Status Report		\$ 1,733	\$ 0
		<i>Second Payable Milestone</i>		\$ 29,608	\$ 0

## 2: Items Not-Completed During this Quarterly Period:

<i>Item #</i>	<i>Task #</i>	<i>Activity/Deliverable</i>	<i>Title</i>	<i>Federal Cost</i>	<i>Cost Share</i>
4	1	Literature review		\$ 43,040	\$ 0
6	3	Pipeline Condition Report		\$ 0	\$ 0
7	4	Identify Target Methods		\$ 45,182	\$ 0

Item 4 Literature Review (Task 1), Item 6 Pipeline Condition Report (Task 3), and Item 7 Identify Target Methods (Task 4) are all ongoing and expected to be complete in the next quarter (June 30). We will invoice those items at that time.

### 3: Project Financial Tracking During this Quarterly Period:



#### **4: Project Technical Status –**

*Item 1. Task 1 Literature Review – ongoing, expected to be completed in Q3.*

For the P3LD project, account set up for both CSU and partner SMU has been delayed due to a delay in receiving the project cost share from the ECMC and Colorado PUC. Both are processing their contributions now and CSU has received draft award agreements from both agencies as of March 27.

*Item 2. Task 2 – Form Technical Advisory Panel*

Relevant to Task 2, the Technical Advisory Panel has been assembled and finalized. Our next TAP meeting is scheduled for April 29, 2025, at 9 am MT/11 am ET. NDAs have been completed by our two academic panel members. The team continues to recruit and add TAP members.

*METEC Underground Testbed – Preliminary Pipeline Progress*

While reporting on developments on the buildout of the METEC underground pipeline testbed for which testing will be performed are not task driven and are not billable to this project, they are relevant and will motivate all future project progress. Furthermore, preliminary research of survey methods, fixed sensor designs, and pipeline standards necessary for the buildout are directly relevant to the literature review, pipeline reviews, and next generation survey methods of Task (1), (3), and (4) respectively.

After delays in receiving construction approvals, the build out of the underground testbed is expected to start on April 1. Provided no unforeseen delays, we expect the testbed to be operational by June 2.

#### **5: Project Schedule –**

No known major technical or programmatic issues. Minor programmatic issues include delays in issuance of billing accounts for which time can be spent on the project. Future reports will evaluate effect on project timeline.

An adjusted Attachment 2. Project Deliverables is included here, adjusting the literature review draft to be received at month 9 rather than month 6.

Our intentions for Q3 will be to complete a complete a draft of the literature review in accordance with Task (1). Pipeline plans for the next reporting period that are separate, but relevant, include completion of the physical initial buildout of the pipeline according to the work progress discussed above. Sensor and gas control integration will be discussed in the next report and completion of integration will be completed through Q3.

#### **6. Attachments**

*1. Attachment 2. Project Deliverables*

## **P3LD: Practical Protocols for Pipeline Leak Detection**

PI, Daniel Zimmerle, Colorado State University

### **PROJECT DELIVERABLES**

Gantt chart at end of attachment, for reference.

1. Literature review developed and documented as a short report or included in the quarterly report. **Initial draft at month 9 (6/1/25). Finalized by quarterly report for month 12 (9/1/25).**
2. TAP constituted. **TAP formed and schedule set at 6 months. Report on TAP in quarterly report month 6. (3/1/25)**
3. Report on pipeline conditions, see narrative for content. Possible journal publication if data are significant.
  - a. **Draft report at month 9 (9/30/25).**
  - b. **Final report at month 12 (12/30/25).**
  - c. **Decision on journal publication at month 12 (9/30/25).**
  - d. **Draft journal publication submitted, if warranted, at month 18. (3/30/26)**
4. Presentation documenting methods selected for testing.
  - a. **Methods selected at month 9 (6/30/25).**
  - b. **Results included in quarterly report month 12 (12/30/25).**
  - c. **Presentation to TAP and PHMSA at month 12.**
5. Present Round 1 testing results to TAP & PHMSA **at month 21 (3 months after R1 testing complete) (6/30/26).**
  - a. Test Round 1 – starts at month 9 (6/1/25), ends month 18 (3/30/26)
6. Written summary of Round 1 testing results in **quarterly report at month 21 (6/30/26).**
7. Draft protocol document 3 months after Round 1 testing completed **at month 21 (6/30/26).**
8. Present Round 2 testing results to TAP & PHMSA **at month 30 (3 months after R2 testing complete).**
  - a. Test Round 2 – starts at month 18 (3/30/26), ends month 27 (12/30/26)
9. Written summary of Round 2 testing results in **quarterly report at month 30 (3/30/27) .**
10. Final protocol document **at month 30 (3/30/27).**

11. Drafts of one or more peer-reviewed publications summarizing results **at month 30, with final report. (3/30/27)**
12. Present results of field observations to TAP and PHMSA 3 months after field testing complete **at month 24.**
  - a. **Field observations – start after protocol updates are reviewed with TAP – month 21 (6/30/26)**
  - b. **Field observations from month 21-24 (9/30/26)**
13. Summarize field testing results in final report **at Month 30.**
14. Quarterly reports. **Required content, plus enhanced content as noted above.**
15. Final report **at month 30. (3/30/27)**
16. Final protocol documents **with final report at month 30 (3/30/27)**

Gantt chart, for reference:

